

REMARKS

Claims 1-27 are pending in this application. No claims are being amended. No new matter is being introduced by way of the remarks below addressing rejections set forth in the Office Action at hand.

The Applicants take note that in the Office Action the Examiner has allowed claims 14-26. The Applicants thank the Examiner for allowing these claims.

§ 102 Rejections

In the Office Action, claims 1-11, 13 and 27 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent Application 2003/0146876 to Greer et al., hereinafter “Greer.”

Brief Description of Present Invention

The present invention relates to a technique for operating a directional antenna array in a wireless network. According to an aspect of the technique, a wireless station uses a System Management Entity (SME) to steer a directional antenna array to receive a wireless signal from an access point (AP) in the wireless network. A Medium Access Control (MAC) layer provides metrics associated with the AP’s wireless signal to the SME. Based on the provided metrics, the SME steers the directional antenna array to a selected direction associated with the AP.

Description of the Cited References

Greer describes an antenna system that provides various diversity characteristics. According to Greer, the antenna system achieves polarization diversity by a differential orientation of two antennas or the use of two antennas having different signal polarization (e.g., one antenna have vertical polarization and the other having horizontal polarization). The antenna system achieves spatial diversity by the placement of the antennas in a spaced-apart configuration. Radiation pattern diversity is achieved by the system from the use of two antennas with different patterns or by orienting two antennas with the same radiation pattern in opposition. See Greer, paragraph 0021.

Greer further describes a controller which is configured to provide switching or summing functions on signals received by or transmitted from the antennas in the antenna system. For received signals, Greer teaches that (1) a signal performance metric may be determined for a received signal using each of the antennas and (2) the antenna that provides the best metric may be selected as the receiving antenna. For transmitted signals, Greer notes that a similar function may be performed at a receiving device that is separate from the antenna system, and the separate receiving device may advise the antenna system as to which of the two antennas provided the better received signal at the receiving device. The controller then selects the antenna that provided the better received signal as the transmit antenna. See Greer, paragraphs 0046 and 0057.

Differences Between the Present Invention and the Cited Art

The MPEP at § 2131.01 states that:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131.01 quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Representative claim 1 recites in relevant part:

1. A method for operating a directional antenna in a Wireless Local Area Network (WLAN), comprising:

causing a Medium Access Control (MAC) layer to provide metrics associated with respective beam angles of the directional antenna;...

Applicants respectfully submit that Greer does not expressly or inherently describe Applicants' claimed *causing a Medium Access Control (MAC) layer to provide metrics associated with respective beam angles of the directional antenna* as claimed by Applicants.

Greer mentions a MAC layer comprising a set of protocols that maintain order among users accessing a network. Greer further mentions the IEEE 802.11 standard which utilizes collision avoidance to enable orderly access to the network by various

users. See Greer, paragraphs 0012-0013. However, nowhere does Greer describe, either expressly or inherently, causing a MAC layer to provide metrics with respective beam angles of a directional antenna using a MAC layer, as claimed by Applicants. Although, Greer appears to indicate that metrics determined by a receiving device are returned to a transmitter to enable the transmitter to decide on an antenna that provides a better received signal at the receiving device, Greer fails to indicate how the metrics are actually returned. For example, it is possible that the metrics may be returned to the transmitter via a direct connection between the receiver and transmitter where a MAC layer is not involved to communicate the metrics across the connection. Moreover, the disclosure of the MAC layer by Greer appears to be geared towards describing access to the network and not towards providing *metrics associated with respective beam angles of the directional antenna* as claimed by Applicants.

Because of the absence of *causing a Medium Access Control (MAC) layer to provide metrics associated with respective beam angles of the directional antenna* in Greer, Applicants respectfully submit that Greer does not anticipate Applicants' claims 1-11, 13 and 27 and respectfully request that the above rejections to these claims be withdrawn.

§ 103 Rejections

In the Office Action, claim 12 was rejected under 35 U.S.C. § 103 as being unpatentable over Greer in view of U.S. Patent Application 2003/0048770 to Proctor, JR., hereinafter "Proctor."

35 U.S.C. § 103(c) states:

"Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

Applicants respectfully submit that Proctor is thus not available as prior art. At the time the present invention was made Proctor as well as the present invention were

subject to an obligation of assignment to the same corporation, i.e., Tantivy Communications, Inc. Enclosed is a declaration which attests this, which is signed by David J. Thibodeau, Jr. Also enclosed is a copy of a recorded assignment to Tantivy Communications, Inc. for provisional application number 60/414,946 to which this application claims priority.

For reasons set forth above, Applicants respectfully request that the above rejection of claim 12 be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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